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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,479	09/13/2001	Siegfried Schweidler	PD990014	6074

7590 02/07/2007

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EXAMINER	
LI, ZHUO H	
ART UNIT	PAPER NUMBER
2185	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/936,479	SCHWEIDLER ET AL.	
	Examiner	Art Unit	
	Zhuo H. Li	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 6, 2006 has been entered.

Response to Amendment

2. This Office Action is in responds to the Amendment filed on December 6, 2006, claims 1-9 are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyer et al. (US PAT. 5,410,546 hereinafter Boyer) in view of Hamada (JP 411,004,255A).

Regarding claim 1, Boyer discloses a method for management of data received via a serial data bus (108, figure 1), in a receiving device (107, figure 1) comprising the steps of

receiving data packet transmitted in bus packets having a variable length (col. 6 lines 12-15), each bus packet having a header portion of the packet, read as a header, and a data portion, read as a payload data field, a counter (415, figure 4) for carrying out a modulo-n counting of the data block in order to determine the data source packet boundaries (col. 13 lines 1-23) and in that the beginning of a new data source packet is signaled to a memory management device at the beginning of the next counting interval (col. 13 lines 30-64 and col. 16 line 66 through col. 17 line 6). Boyer differs from the claimed invention in not specifically teaches the payload data field being divided into a number of data blocks having a defined length, a combination of a defined number N of data blocks forming a data source packet of fixed length, section-by-section transmission of the data source packet within the framework of data blocks being permitted. However, Hamada discloses packet multiplex transmission device (figure 1), receive variable-length packet, (106, figure 1) comprising a packet length information (203), i.e., header, stored in the recording buffer (101, figure 1), and the variable length pack (106) is further transfer to the input/output control unit (102, figure 1) via the buffer [0012], wherein the input/output control unit (102) is capable to perform a generation function, which dividing the variable-length packet (201, figure 2) into a number of data blocks in a fixed length frame (202, figure 2) with a plurality of fixed data blocks (pk+1 to pk+3, figure 2), and header information (204, figure 2) with fixed-length frame header (113), and further transmit out in a fixed length frame output (114, figure 1) and ([0014-0018]), in addition, Hamada discloses each of the variable length packet is transmitted and outputted as a fixed-length frame about the inputted variable-length packet at the fixed length packet based on the packet size information to determine the N of the fixed length blocks, i.e., (pk+1 to pk+3), and the variable length packet is divided into two or

more fixed-length frames with its header information to locate the beginning of the variable-length packet, and a down counter (103) cooperate with the first header pointer to determining the size of the variable length packet transfer at the fixed length frame with its corresponding blocks ([0020] to [0025]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the data management device of Boyer in having the payload data field being divided into a number of data blocks having a defined length, a combination of a defined number N of data blocks forming a data source packet of fixed length, section-by-section transmission of the data source packet within the framework of data blocks being permitted, as per teaching by the packet multiplex transmission device of Hamada, because it reduce power consumption, and improves transmission efficiency (abstract).

Regarding claims 2-3, Boyer discloses each bus packet being subject to CRC checking and the checking results being buffer-stored in order to be able to ascertain whether a data source packet transmitted in two or more bus packets has been transmitted without transmission errors, wherein a reference count reading is transmitted in each bus packet in order to check the completeness of the transmitted data, and in which comparison counting of the received data block is effected and, when the data block associated with the reference counter reading is received, the result of the comparison counting is compared with the reference counter reading and an error signal is output in the event of non-correspondence (col. 7 lines 11-24).

Regarding claim 4, Hamada differs from the claimed invention in not specifically teaching wherein the defined number n of data blocks of a data source packet corresponds to the number 8 and the modulo-n counting is correspondingly modulo-8 counting. However, it is old and notoriously well known in the art of having the defined number of n data blocks

corresponding to the number of 2 to power x, where x = 1, 2, 3, ..., in which 8 is equal to 2 to power 3. In addition, utilizing modulo-8 counter do not have a disclosed purpose nor overcome any deficiencies in the prior art such that the number of n of data blocks of a data source packet may contain any number, i.e., 2, 4, 8, ... Note Hamada discloses the fixed length frame comprising a plurality of packet data blocks (pk+1 to pk+3), and the variable length packet is divided into two or more fixed-length frames with its header information to locate the beginning of the variable-length packet, and a down counter (103) cooperate with the first header pointer to determining the size of the variable length packet transfer at the fixed length frame with its corresponding blocks. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hamada in utilizing modulo-8 counter for counting 8 of data blocks of a data source packet, as disclosed supra, because applicant does not disclose that the number 8 and modulo-8 counting, as opposed to other size, overcome a deficiency in the prior art or for any stated purpose.

Regarding claim 5, the limitations of the claim are rejected as the same reasons as set forth in claim 1.

Regarding claims 6-7, the limitations of the claims are rejected as the same reasons as set forth in claims 2-3.

Regarding claim 8, Boyer discloses the counter (415, figure 4) by which data are counted in particular in units of bytes and which outputs a data block counting signal if the number of data that have been countered are as many as defined as belonging a data block (col. 13 lines 1-23).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boyer et al. (US PAT. 5,410,546 hereinafter Boyer) and Hamada (JP 411,004,255A) as applied to claim 5 above, and further in view of Lo et al. (US PAT. 6,324,178 hereinafter Lo).

Regarding claim 9, Boyer differs from the claimed invention in not specifically teaching data bus being designated according to the IEEE 1394 standard and the apparatus is part of data link layer module in the interface for this data bus. However, Lo teaches IEEE 1394 serial bus communication standard becoming a popular standard adopted by manufacturers of computer systems and peripheral components for its high speed and interconnection flexibilities (col. 1 lines 31-35). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Boyer in having data bus being designated according to the IEEE 1394 standard and the apparatus is part of data link layer module in the interface for this data bus, as per teaching of Lo, because it provides high speed and interconnection flexibilities.

Response to Arguments

6. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H. Li whose telephone number is 571-272-4183. The examiner can normally be reached on Mon - Fri 10:00am - 6:30pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on 571-272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhuo H. Li

Patent Examiner
January 31, 2007

SANJIV SHAH
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